Making Conservation Work for You

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for

Office of Rural Community Affairs

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Topics

- Demand Profile and Programmatic Decisions
- Price
- Conservation = $avings

Conservation

- Results from
  - Behavior
  - Efficient Equipment
- Utility and customer cooperation

Public

- Support is essential
- Expects leadership from utility
- Can be an ally or a partner
- Can drive new program development

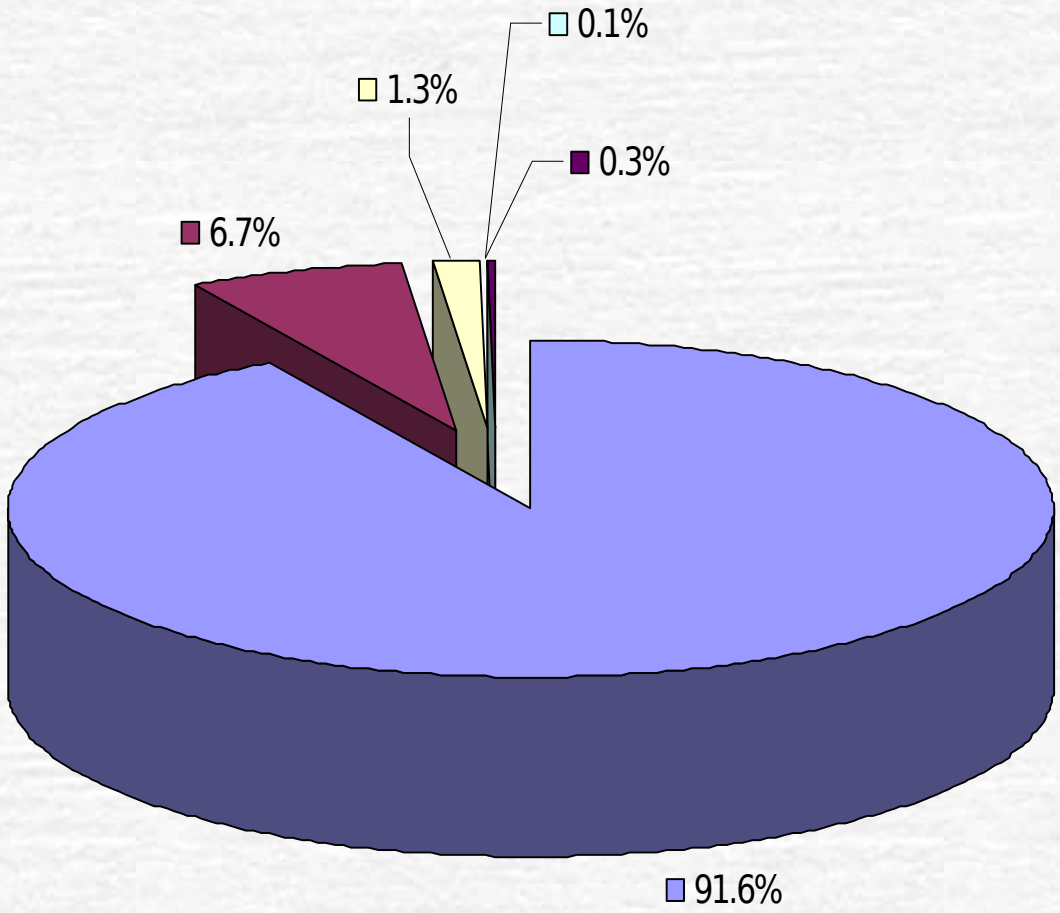
Conservation Goals

- Percent reduction
- Per Capita reduction
- Cost/Benefit

Demand Profile

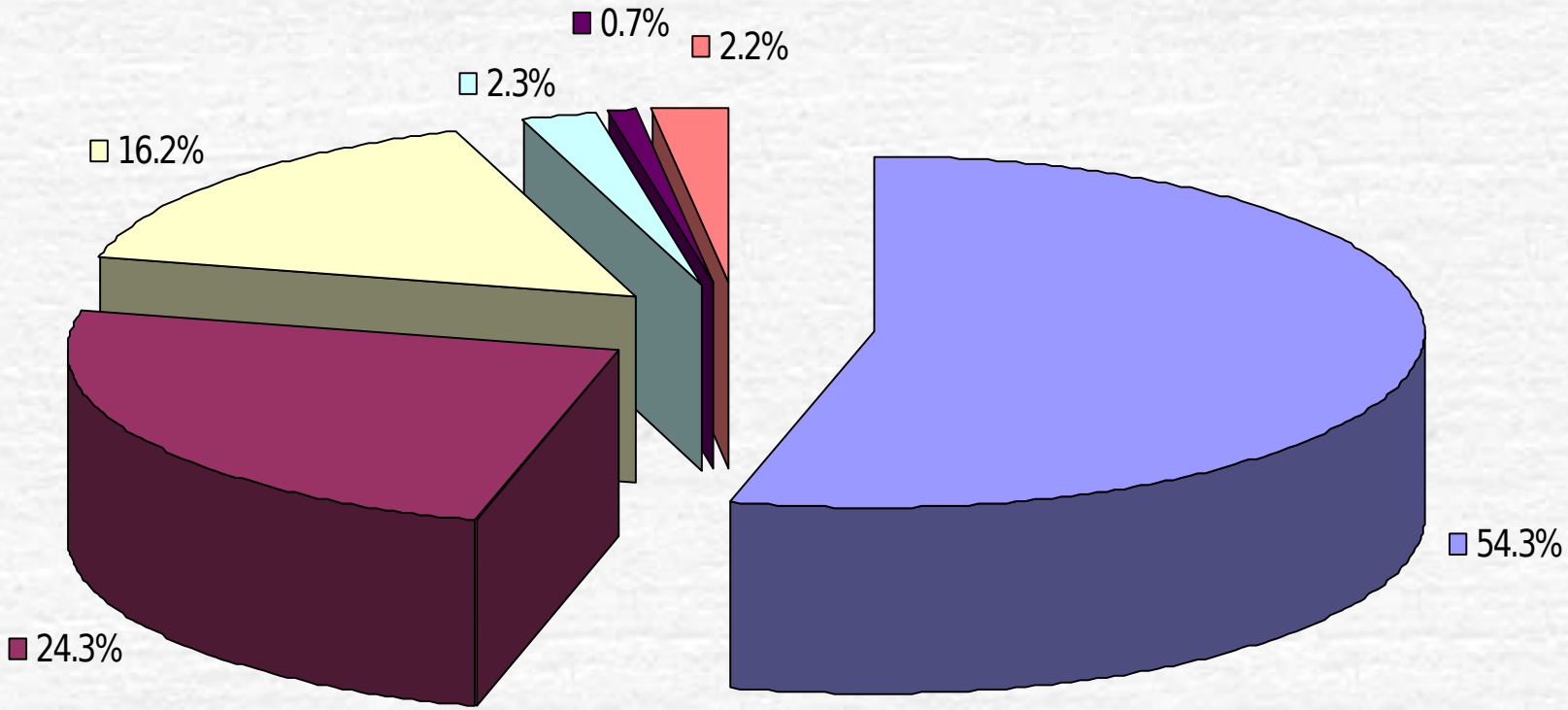
- Lost or un-metered water
- Customer classes
- Summertime peaking
- Growth projections

Connections by Customer Class



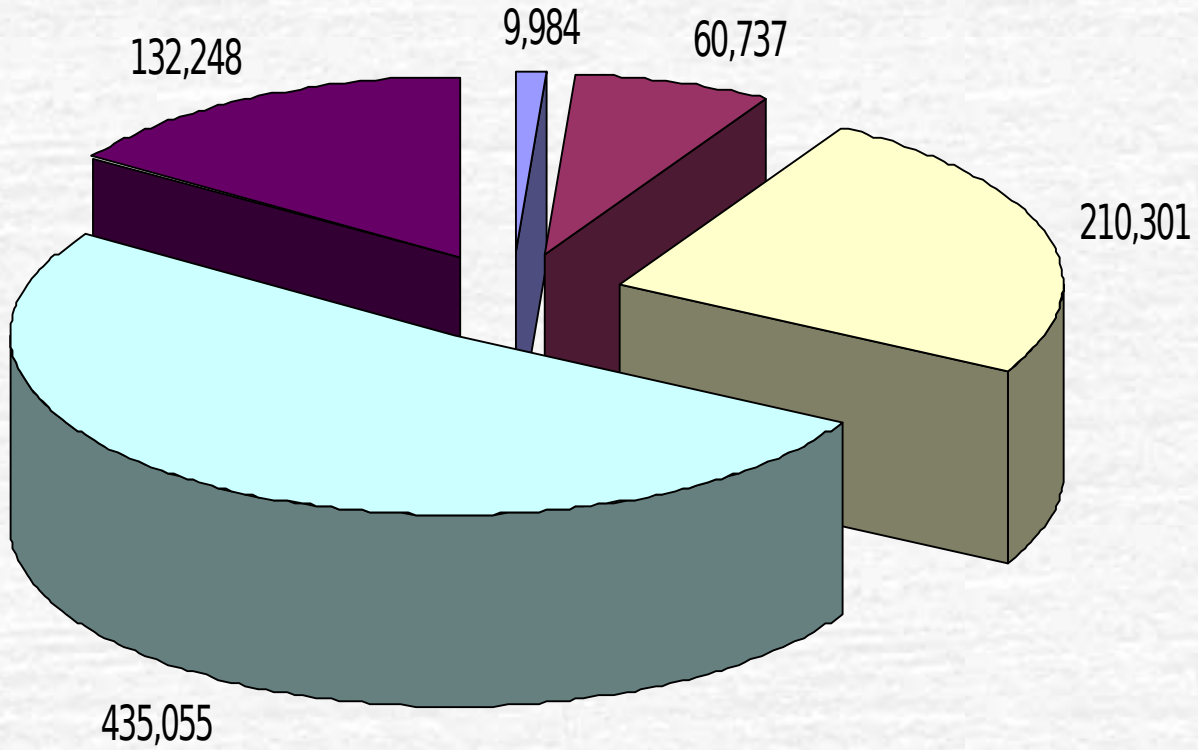
SAWS 1995

Water Consumption by Customer Class

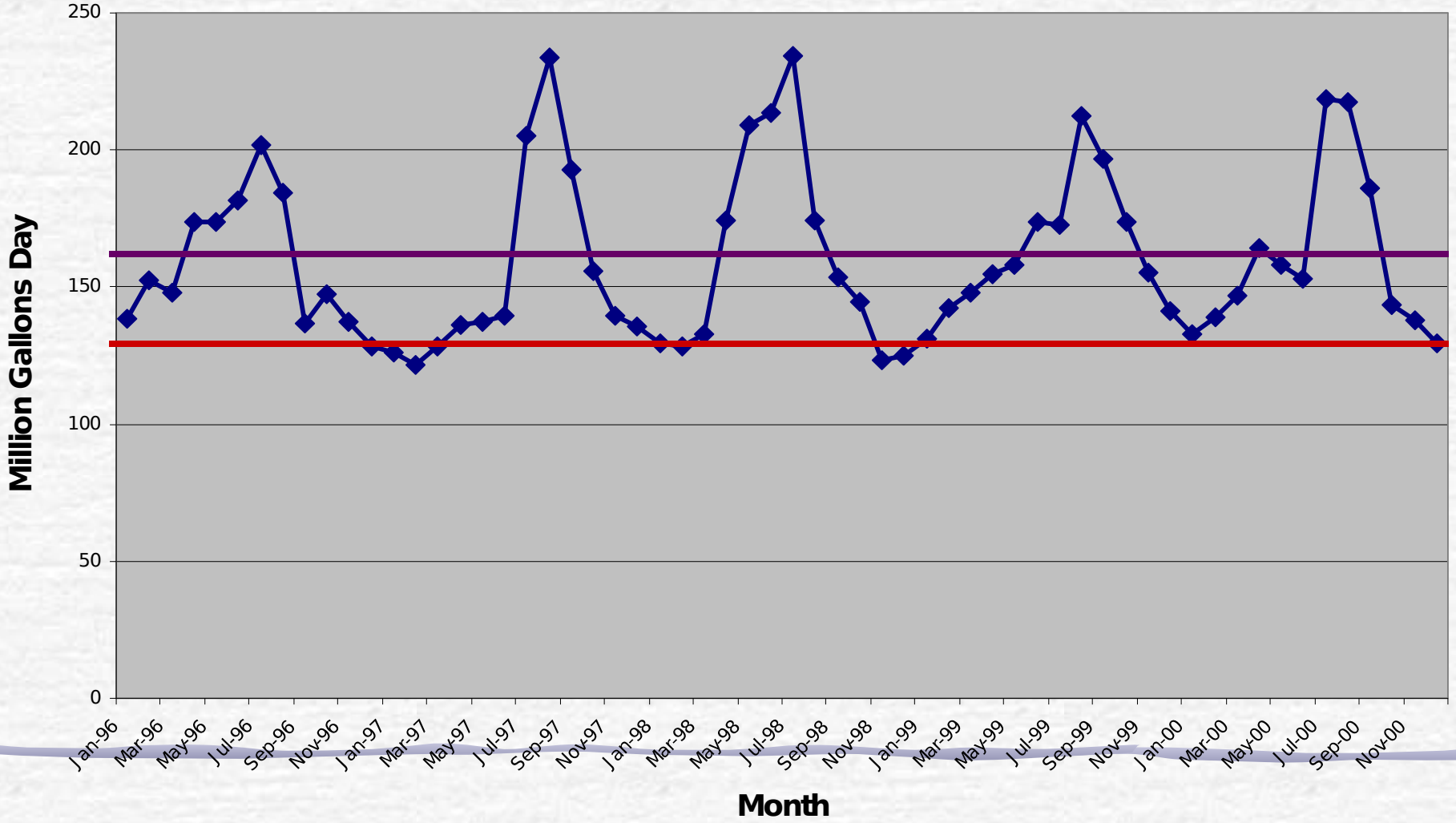


SAWS 1995

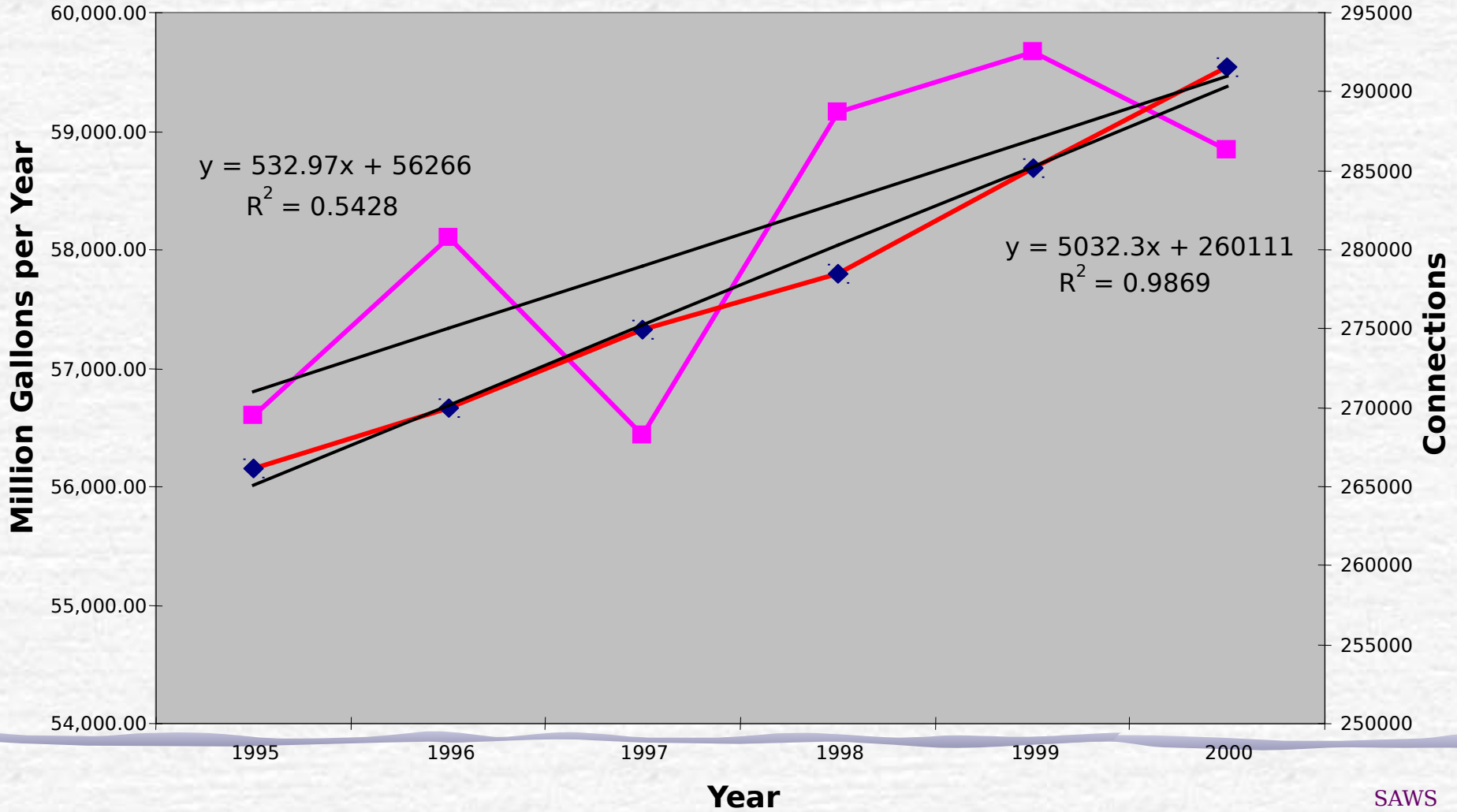
Average Monthly Consumption per Connection (gallons)



Average Daily Pumping



Annual Pumping versus Growth
San Antonio Water System



Historical Water Use

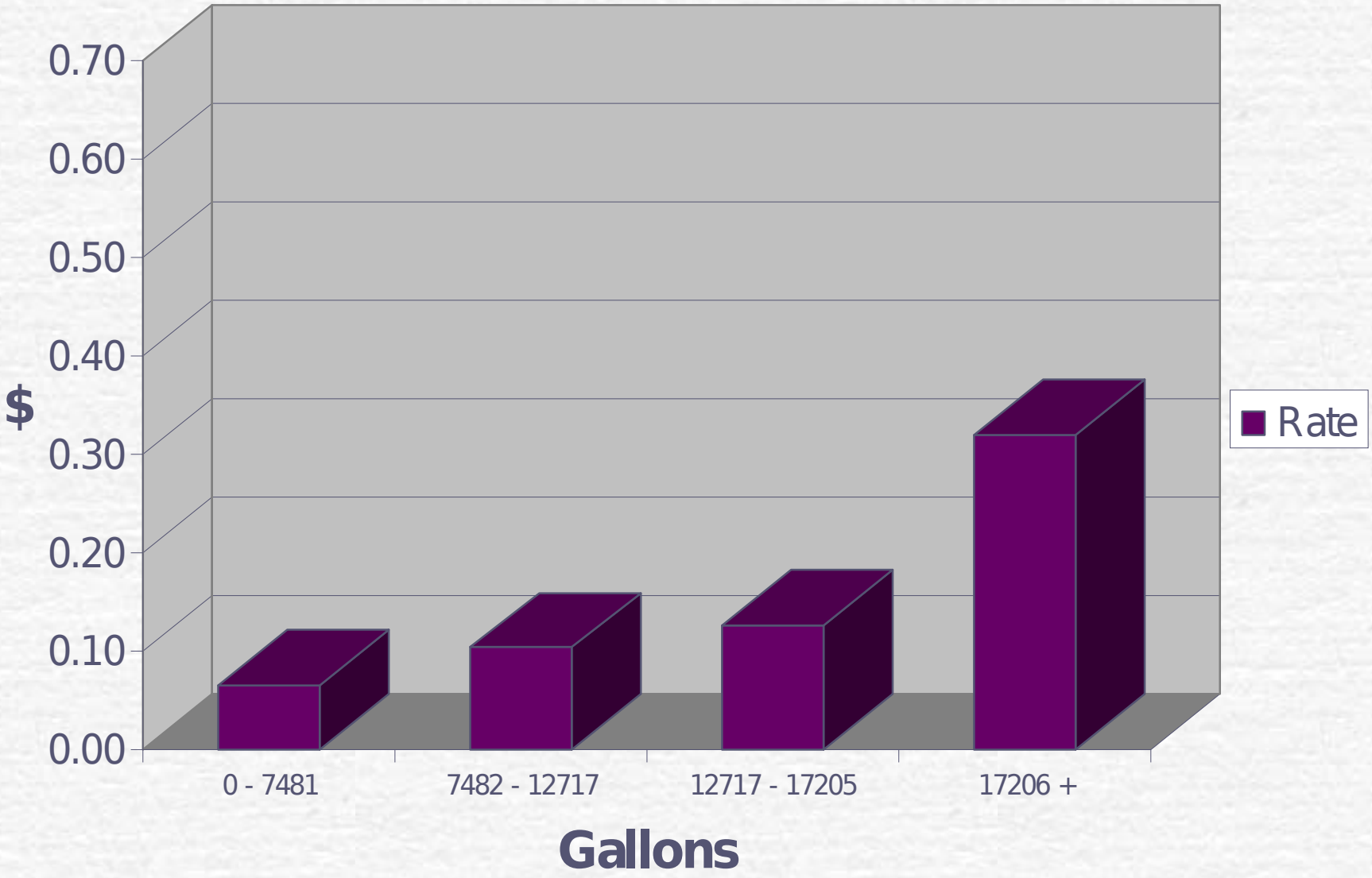
The Basics

- Water Accountability Program
  - Metering
  - System Audit and Leak Detection
- Conservation Pricing
  - Increasing Block Rates
  - Irrigation Rates

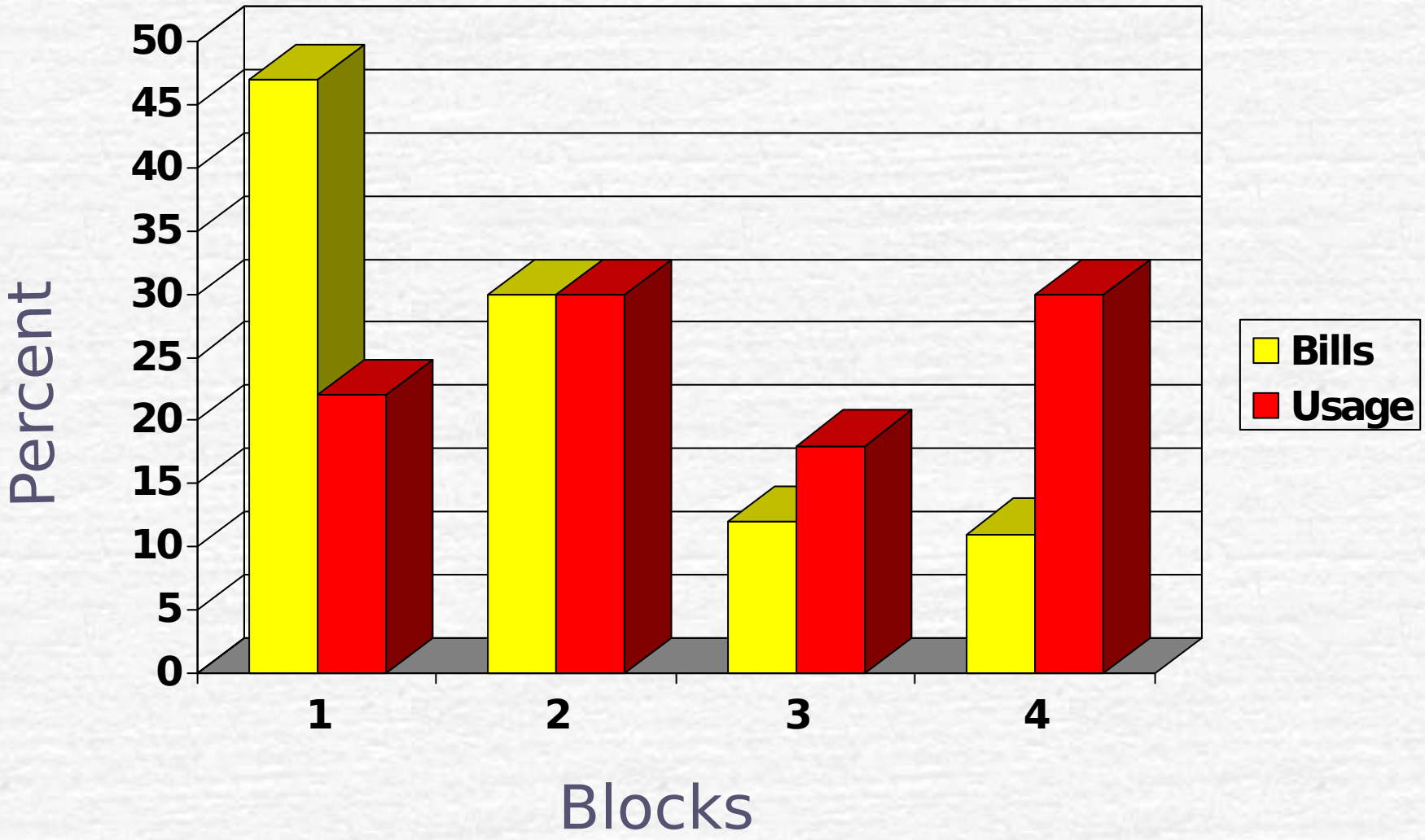
Price

- Cost/Benefit
- Avoided costs
- Rates:
  - Best motivator for outdoor and discretionary water use
  - Inverted blocks or drought surcharges
  - Water budgets

Residential Rate per 100 Gallons



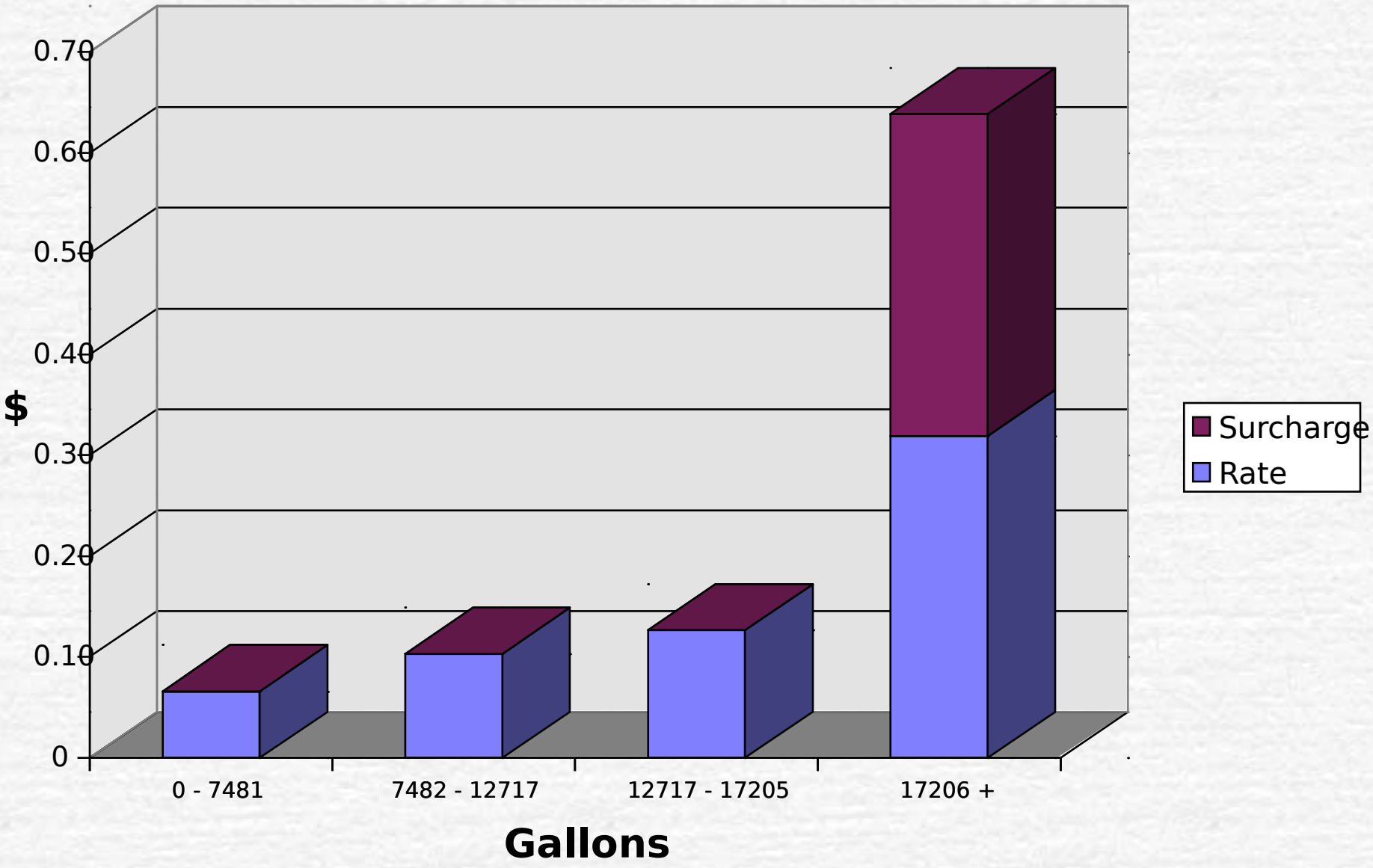
Residential
Annual Bills Vs. Usage

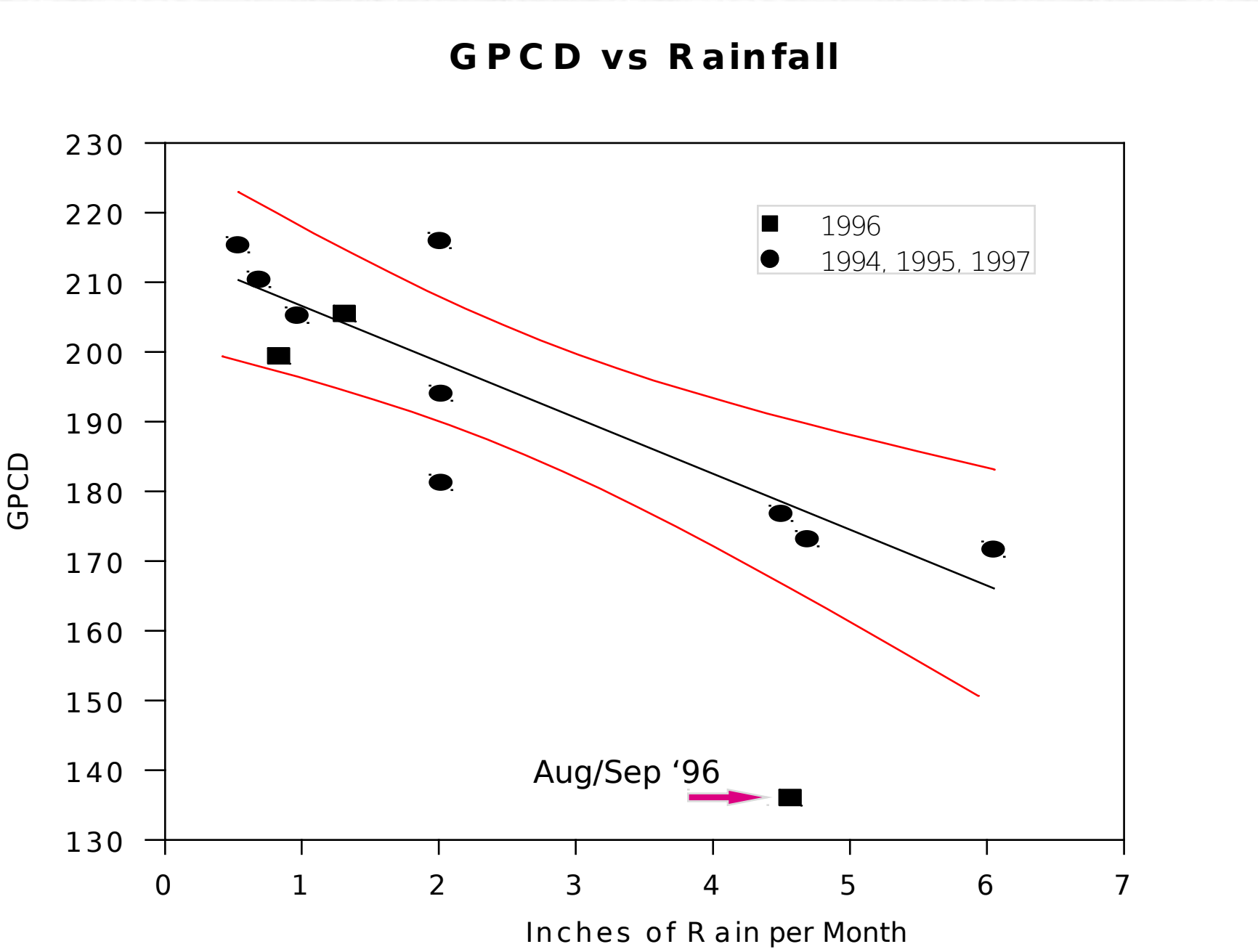


Drought Surcharges

- Significant percentage increase
- Only top or excess users
- Automatic
- They Work!

Residential Rate per 100 Gallons (with Surcharge)




GPCD vs Rainfall
GPCD
230
220
210
200
190
180
170
160
150
140
130
0
1
2
3
4
5
6
7
Inches of Rain per Month
1996
1994, 1995, 1997
Aug/Sep '96

Drought Surcharge Results

- Rainfall and Critical Period Management most significant
- Best fit: 154 gpcd
- Actual: 136 gpcd
- 271 to 573 million gallons additional conservation above predicted amount.

Best Management Practices (EAA)

Core Municipal

- System Audits, Leak Detection and Repair
- Public Information
- School Education
- Conservation Pricing
- Metering
- Water Waste Prohibition
- Conservation Coordinator

Initiatives with Retail Customers

- Public Education and Information Programs
  - Learning to be Water Wise
  - Project Wet
- Large Landscape

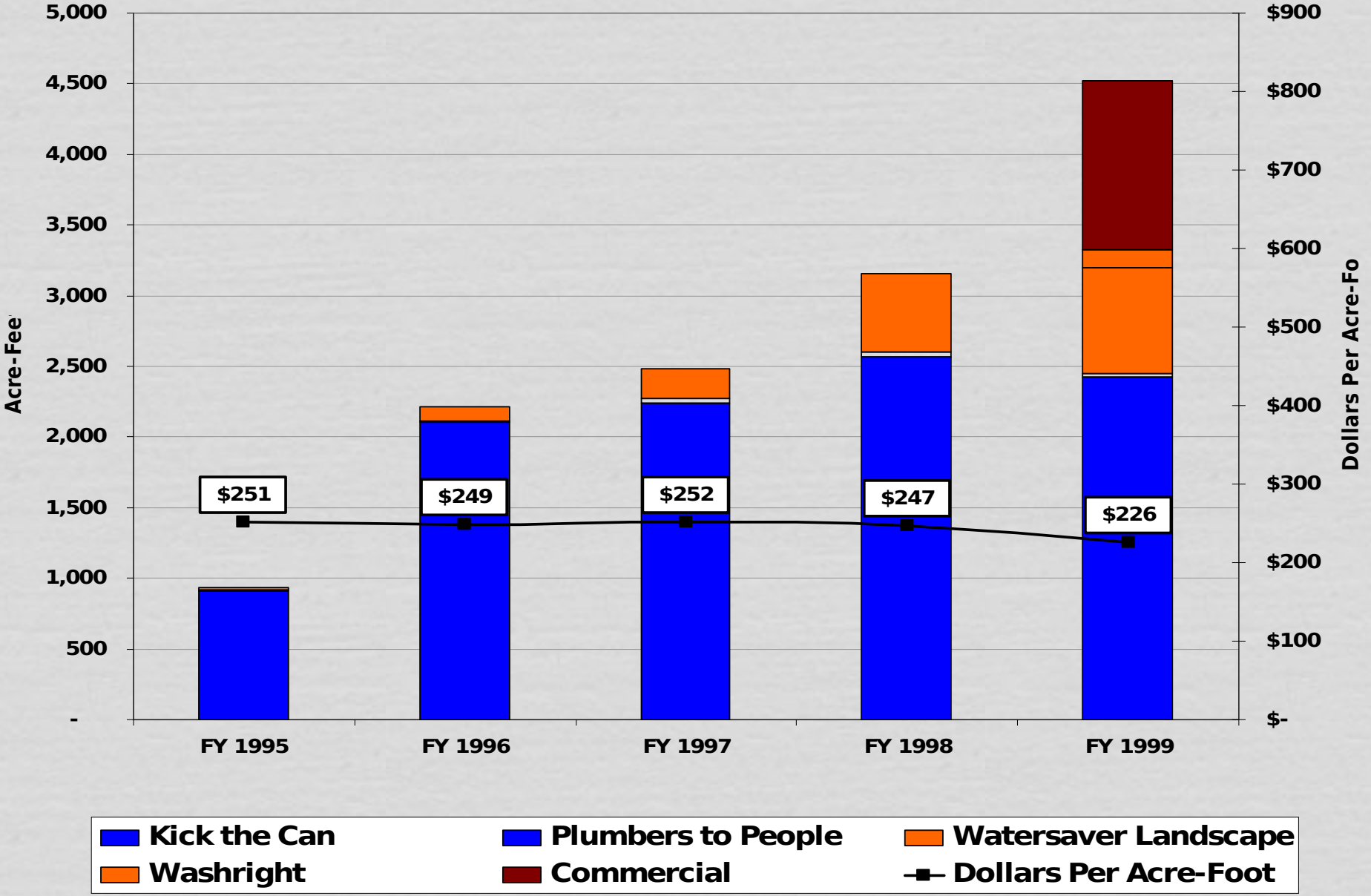
Conservation Programs

- Water Survey Program

For Residential Custom

Costs Of Water Saved And Acre Feet Saved

Conservation Programs



Conclusion

- Utility & public cooperation essential
- Understanding demand = success
- Conservation is a benefit
- BMPs help with planning and management of programs

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